

From the INTERNATIONAL SEARCHING AUTHORITY

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23 MAR 1998

PCT

INVITATION TO PAY ADDITIONAL FEES

(PCT Article 17(3)(a) and Rule 40.1)

Applicant's or agent's file reference

526199

Date of mailing
(day/month/year)

19/03/1998

PAYMENT DUE

within 30 months/days
from the above date of mailing

International application No.

PCT/GB 97/02591

International filing date
(day/month/year)

24/09/1997

Applicant

ALLVOICE COMPUTING PLC et al.

1. This International Searching Authority

- (i) considers that there are 3 (number of) inventions claimed in the international application covered by the claims indicated ~~below~~ on the extra sheet:

and it considers that the international application does not comply with the requirements of unity of invention (Rules 13.1, 13.2 and 13.3) for the reasons indicated ~~below~~ on the extra sheet:

- (ii) ☒ has carried out a partial International search (see Annex) ☐ will establish the international search report on those parts of the international application which relate to the invention first mentioned in claims Nos.:
1-42, 45-49, 52, 55-62, 71, 74
- (iii) will establish the international search report on the other parts of the international application only if, and to the extent to which, additional fees are paid

2. The applicant is hereby invited, within the time limit indicated above, to pay the amount indicated below:

2200,- DEM x 2 = 2200,- DEM
Fee per additional invention number of additional inventions total amount of additional fees

The applicant is informed that, according to Rule 40.2(c), the payment of any additional fee may be made under protest, i.e., a reasoned statement to the effect that the international application complies with the requirement of unity of invention or that the amount of the required additional fee is excessive.

3. ☐ Claim(s) Nos. _____ have been found to be unsearchable under Article 17(2)(b) because of defects under Article 17(2)(a) and therefore have not been included with any invention.

Name and mailing address of the International Searching Authority



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DUE	18/4/98
BRING-UP	1/4/98

1. Claims: 1-42, 45-49, 52, 55-62, 71, 74

Processing (editing) the output of a speech recognition engine whereby audio data is linked to recognition data for audio playback and permitting correction of speech recognition errors. Link data between the recognition data and the audio data is updated after the processing of the recognition data.

2. Claims: 43-44, 53, 54, 63-70, 72, 73, 75-78

Processing the output of a speech recognition engine whereby audio data is linked to the recognised characters for audio playback. Audio data for which there are no corresponding recognised characters (audio messages) are stored in a storage means in association with a file of recognised characters.

3. Claims: 50, 51

Data correction apparatus for assisting a user in correcting received recognition data on a display. The apparatus comprises an automatic error detection means capable of highlighting on a display characters with a likelihood indicator below a likelihood threshold.

The International Searching Authority considers that the present application contains three inventions, not linked by a single general inventive concept (Rule 13.1 PCT). This observation is based on the following reasons:

a. The prior art has been defined as either D1=US-A-5031113 or D2=IBMTDB vol. 36, no 06A, June 1993.

a.1 Both documents disclose a data processing apparatus (and corresponding method) having input means for receiving recognition data from a speech recognition engine and audio data; recognition data and audio data storage means; processing means; link means for linking the recognition data to the audio data and link data storage means; display means; user operable selection means for selecting a word on the display for audio playback via a audio playback means and correction means for correcting a displayed word which has been incorrectly recognised.

Furthermore, D1 discloses a speech recognition update means which updates the speech recognition models based on corrected recognised words.

In addition to described in paragraph a.1, D2 also discloses a data processing arrangement for correcting speech recognition errors via audio playback on an editor work station by a different person than the speaker of the recognised text.

b. Consequently, the special technical features identified by comparison with this prior art, as defined in Rule 13.2 PCT, are the following:

b.1 for invention nr. 1 (claims 1-42, 45-49, 52, 55-62, 71, 74):
updating the link data after processing of the inputted recognised data
for maintaining the link between the audio data and the recognised data.

b.1.1 from this special technical feature the objective problem to be
solved by the first invention can be seen in the correction of speech
recognition errors through audio playback after processing (editing) of
recognition data.

b.2 for invention nr. 2 (claims 43-44, 53, 54, 63-70, 72, 73, 75-78):
storing audio data for which there are no corresponding recognised
characters (audio messages received during switch off of the speech
recognition engine) in a storage means in association with a file of
recognised characters for audio playback.

b.2.1 from this special technical feature the objective problem to be
solved by the second invention can be seen in instructing a user of a
data processing apparatus with audio playback capabilities.

b.3 for invention nr. 3 (claims 50, 51):
recognition data including a likelihood indicator for each character
indicating the likelihood that the character is correct, and an automatic
error detection means highlighting a character on a display having a
likelihood indicator below a specified likelihood threshold.

b.3.1 from this special technical feature the objective problem to be
solved by the third invention can be seen in visually informing a user of
potential errors in recognition data.

c. The above analysis shows that the special technical features of
invention 1 are not the same or similar to those characterising the other
two inventions. Furthermore, a comparison of the objective problem 1 with
each one of the objective problems 2 and 3, all seen in the light of the
description and the drawings of the present application, indicates that
these objective problems are all different and have no corresponding
technical effects with regard to the first one. As a result, no
correspondence (as defined in Rule 13.2 PCT, 2nd sentence) is present
between the special technical features of invention 1 and those
characterising the other two inventions.

c.1 The special technical features of inventions 2 and 3 are also not the
same and, since they all solve different problems and have no
corresponding technical effects, they are also not corresponding.

d. Thus, the application does not comply with the requirement of Unity of
Invention (Rule 13 PCT).

1. The present communication is an Annex to the invitation to pay additional fees (Form PCT/ISA/206). It shows the results of the international search established on the parts of the international application which relate to the invention first mentioned in claims Nos.:
 1-42, 45-49, 52, 55-62, 71, 74
2. This communication is not the international search report which will be established according to Article 18 and Rule 43.
3. If the applicant does not pay any additional search fees, the information appearing in this communication will be considered as the result of the international search and will be included as such in the international search report.
4. If the applicant pays additional fees, the international search report will contain both the information appearing in this communication and the results of the international search on other parts of the international application for which such fees will have been paid.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 031 113 A (HOELLERBAUER WERNER) 9 July 1991	1-3, 12, 13, 19, 23-25, 34, 45-49, 52, 55-59, 61, 62, 71, 74
A	see column 1, line 24 - column 6, line 24; figures	5, 8, 27, 30, 35, 37, 60
X	--- "IMPROVED CORRECTION OF SPEECH RECOGNITION ERRORS THROUGH AUDIO PLAYBACK" IBM TECHNICAL DISCLOSURE BULLETIN, vol. 36, no. 6A, 1 June 1993, pages 153-154, XP000372386 see the whole document ---	1-3, 12, 13, 19, 23-25, 34, 45-49, 52, 55-59, 61, 62, 71, 74

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Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *Z* document member of the same patent family

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 649 144 A (IBM) 19 April 1995	1,2,12, 23,24, 34, 45-48, 52,55, 57,71,72
A	see column 1, line 31 - line 39	5,13,19, 27,35, 56,58-62
	see column 4, line 7 - column 7, line 24 ---	
A	GB 2 289 395 A (SONY ELECTRONICS INC) 15 November 1995 see page 4, line 24 - page 5, line 36; claims 1-3 ---	1-78
A	"DISTINCTION AT EXIT BETWEEN TEXT EDITING AND SPEECH RECOGNITION ADAPTION" IBM TECHNICAL DISCLOSURE BULLETIN, vol. 37, no. 10, October 1994, page 391 XP000475710 see the whole document -----	1-78

Patent Family Annex

Information on patent family members

International Application No.

PCT/GB 97/02591

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5031113 A	09-07-91	AT 390685 B	11-06-90
		AT 123893 T	15-06-95
		AU 616807 B	07-11-91
		AU 4367289 A	03-05-90
		CA 2001164 A	25-04-90
		DE 58909293 D	20-07-95
		EP 0366192 A	02-05-90
		ES 2075848 T	16-10-95
		HK 199496 A	08-11-96
		JP 2163819 A	25-06-90
EP 0649144 A	19-04-95	JP 7199379 A	04-08-95
		US 5649060 A	15-07-97
GB 2289395 A	15-11-95	US 5600756 A	04-02-97
		JP 8055466 A	27-02-96